



FX 50



Configuration Guide & Parts List



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IMPORTANT

When programming or configuring the equipment you must ensure that you comply with all relevant standards and legislation. The example settings given in this book may not be legal for trade with the public.

Thank you for choosing this Avery Berkel product.

Please read these safety and user instructions before you use this product.

Please read all the sections of this document that have Danger, Warning and Caution symbols and notices.



WARNING! This is a Warning symbol. Warnings mean that failure to follow specific practices and procedures may have major consequences such as injury to personnel or serious corruption to data or loss of data.



DANGER! This is a Danger symbol. Danger means that failure to follow specific practices or procedures may result in an electrical shock that could cause personal injury or death.



CAUTION! This is a Caution symbol. Cautions give information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.



NOTE: This is a Note symbol. Notes give additional and important information, hints and tips that help you to use your product.

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1. Entering the service mode

This section explains how to enter the service mode of the FX 50 scale so that you can calibrate the scale or change its configuration.



NOTE: To calibrate or configure the scale you need to enter the password number (0000) when the scale asks you so that the scale allows you to access the functions and settings in the service menu.

To access the service menu do as follows:

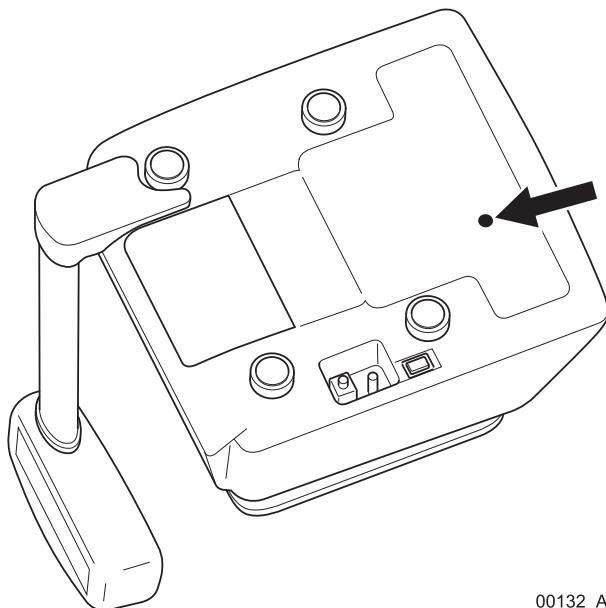
1. Remove any items from the weigh pan.
2. Press the **On** switch  to turn the scale on.
3. While the scale is self-checking itself (that is, while all the numbers on the three displays count down from all nines to all zeros) press the  key. The weight display shows P_n which prompts you to enter the password.
4. To enter the password, press the  key four times (type 0000). The display shows P_n---- .
5. Press the  key to accept the password. The display shows $CR1\ F0$. This is the first option (**F0**) that you use to calibrate the scale.

The service menu has 11 branches with Function (**F**) numbers. To scroll through these options from **F1** - **F9** press the appropriate number key from  -  to select the option you want. If you want to select options **F10** & **F11** press the  /  key repeatedly as these are not available on the number keys.



NOTE: The scale's display shows the name of the option you selected together with number of the option, such as **F1**, **F2**, and so on.

6. Press and release the service button on the underside of the scale.
7. Press the  key to enter an option.



00132_A

Fig 1-1. Service seal and button location

8. Press the **[O]** key to come out of the option you selected and return to the service menu.



NOTE: You cannot press the **[O]** key to come out of the **F0**, **F8** and **F11** options. To come out of **F0**, **F8** and **F11** press the **[C]** key.

9. Press the **[O]** key to come out of the service menu and return to weighing.

2. Calibrating/configuring the scale

The scroll through the options in the menu you need to press the scroll key (►) which is the same as the **F** / **Save** key.

When the scale displays the option you want, press the select option key (▲) which is the same as the **•T•** key.

Scale Display	Name of Function	Instructions
F0 CRL	Calibration	<ol style="list-style-type: none">1. Set the gravity compensation zone rate to 1.0000. This is option F11.2. Press the •T• key to enter the calibration function. The scale displays <i>unLoRd</i>.3. Remove any weight from the weigh pan.4. Press the •T• key. The display shows the calibration weight you requested.5. Put the calibration weight on the weigh pan.6. Press the •T• key to accept.7. Check that all three displays show -----. The scale calibrates, any message appears for a short time on the display and then the display returns to the menu. <p>Possible messages include:</p> <ul style="list-style-type: none">• SPRn PASS• SPRn FR IL Lo <ol style="list-style-type: none">8. Repeat the steps above to calibrate the scale if the scale displays any message other than SPRn PASS.

Scale Display	Name of Function	Instructions
F1 <i>RES</i>	Resolution	<ol style="list-style-type: none"> 1. Press the F / Save key to scroll through the three resolution values of 3000, 6000 or 12000 Range. 2. Press the T key to accept the value shown.
F2 <i>Unit</i>	Unit of weight	<ol style="list-style-type: none"> 1. Press the F / Save key to scroll through the two units of weight options of Kilos (kilos) or Pounds. 2. Press the T key to accept the value shown.
F3 <i>Capa</i>	Capacity	<ol style="list-style-type: none"> 1. Press the F / Save key to scroll through the capacity of the scale options. 2. Press the T key to accept the value shown. <p> NOTE: The options that the scale displays depend on the selections you made in the Resolution (F1) option and the Unit of Weight (F2) option.</p>
F4 <i>Point</i>	Unit of weight decimal point	<ol style="list-style-type: none"> 1. Press the F / Save key to scroll through the numbers 0, 1, 2 or 3 that represent the number of units that the scale displays after the decimal point in the weight display. Alternatively, press the number keys (0)-(9) of 0, 1, 2 or 3. 2. Press the T key to accept the value shown.

Scale Display	Name of Function	Instructions
F5 Point	Unit price decimal point	<ol style="list-style-type: none"> 1. Press the F / Save key to scroll through the numbers 0, 1, 2, 3 or 4 that represent the number of units that the scale displays after the decimal point in the price display. Alternatively, press the number keys (0)-(9) of 0, 1, 2, 3 and 4. 2. Press the -T- key to accept the value shown.
F6 in t 2Ero	Initialization zero range (auto zero range)	<ol style="list-style-type: none"> 1. Press the F / Save key to scroll through the initialization zero range from 0 to 20. 2. Press the -T- key to accept the value shown. <p> NOTE: We recommend that you leave this function at the factory setting of 4.</p>
F7 rE 2Ero	Zero range (manual zero range)	<ol style="list-style-type: none"> 1. Press the F / Save key to scroll through the manual zero range 0 to 20. 2. Press the -T- key to accept the value shown. <p> NOTE: We recommend that you leave this function at the factory setting of 10.</p>
F8 A-d Count5	Display the A/D counts	Press the C key to return to the menu.

Scale Display	Name of Function	Instructions
F9 Entry	Country of operation	<ol style="list-style-type: none"> 1. Press the F / Save key to scroll through the three countries of operation options of USA, EuroPE and AUstrA (Australia). 2. Press the T key to accept the value shown. <p> NOTE: The USA has a different keyboard layout and functionality from the Europe and Australia keyboards.</p> <p> NOTE: The Europe & Australia keyboards have the same functionality except that the Australia keyboard does not support a 100g / kg price base options because it is fixed in Kg.</p>
F10 PErCent tArE	Percentage tare	<ol style="list-style-type: none"> 1. Press the F / Save key to set the percentage tare option to on or off. 2. Press the T key to accept the value shown. <p> NOTE: This option only operates when you have set the Country of Operation function (F9) set to USA.</p>

Scale Display	Name of Function	Instructions
<i>F11 Grav rATE</i>	Gravity compensation zone rate	<p>You use this option to set the gravity compensation zone rate when a scale is calibrated outside of the intended gravity zone of using the scale.</p> <p>An example of setting this option is as follows:</p> <p>If we assume that the scale is calibrated in Birmingham, UK where the gravity is 9.81287 and it will be used by a customer in Denmark where the gravity is 9.81616.</p> <ol style="list-style-type: none"> 1. Divide the intended customer location of Denmark by the calibration location of Birmingham (9.81616 divided by 9.81287) to get a result of 1.00034 (rounded to five decimal places). 2. Enter the gravity compensation zone rate of 1.00034 using the number keys 0-9. 3. Press the ENT key to accept the value you entered. 4. If you do not need to enter a value for the gravity compensation zone rate (if the scale will be used at the same location where it was calibrated) set the rate to 1.0000. <p> NOTE: The number range is limited to between 0.96000 and 1.04000.</p> <p>You must do the calibration with the figure of 1.0000 and the gravity compensation zone rate set afterwards. The scale does not accept numbers entered outside of these values. It displays, <i>Err 15</i> and return the scale to the menu and defaults the rate to 1.0000. So you will have to re-enter the rate if you need to change this figure.</p>

3. Recommended configuration options

This section describes the manufacturer's configuration options for the 3000E models of the FX 50 scale for the three different world region variants which are as follows:

- Europe and the Rest of the World (RoW)
- USA
- Australia.

Weight Display	Name of Function	Setting for Europe & RoW	Setting for USA	Setting for Australia
F0 <i>Cal</i>	Calibration	Set as you prefer.		
F1 <i>res</i>	Resolution	3000	3000	3000
F2 <i>Unit</i>	Unit of weight	Kilos	Pounds	Kilos
F3 <i>Capa</i>	Capacity	15	30	15
F4 <i>Point</i>	Unit of weight decimal point	0.000	0.00	0.000
F5 <i>Point</i>	Unit price decimal point	0.00	0.00	0.00
F6 <i>init zero</i>	Initialization zero range (auto zero range)	We recommend that you leave this at the factory setting (10).		

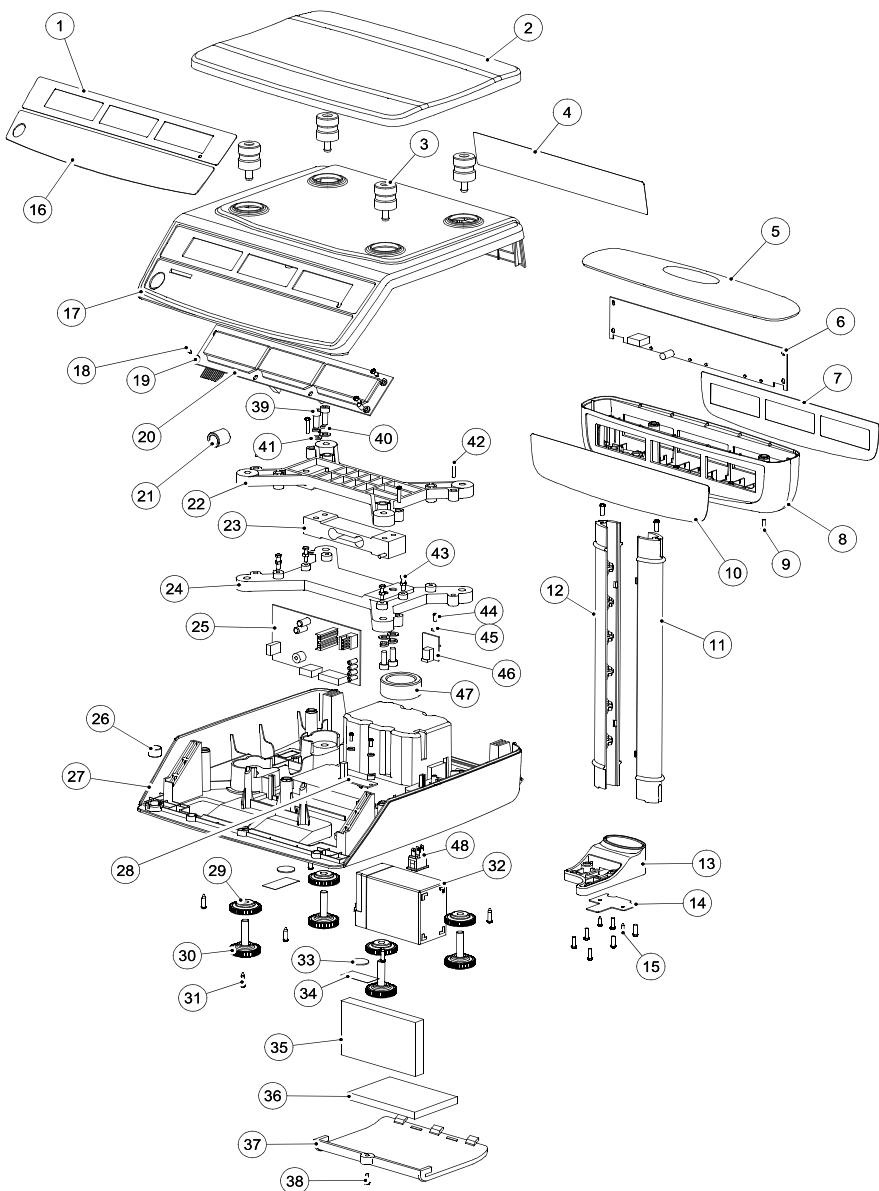
3. Recommended configuration options

Weight Display	Name of Function	Setting for Europe & RoW	Setting for USA	Setting for Australia
F7 rE 2Ero	Zero range (manual zero range)	We recommend that you leave this at the factory setting (2).		
F8 R-d Counts	Display the A/D counts	Not applicable.		
F9 Entry	Country of operation	Europe	USA	Australia
F10 PErCent tArE	Percentage tare	Off	On	Off
F11 Grav rATE	Gravity compensation zone rate	This depends on the zone where the scale was calibrated and the zone where the scale will be used (refer to the F11 function in chapter 2). Otherwise set this to 1.0000.		



NOTE: Press the **C** key to display the audit information that the scale stores in its memory. The audit information gives the number of times that the scale has been calibrated. Press the **•o•** key to return to weighing.

4. Parts list for FX50 3000E model



Item	Description	Qty.	Material	Part number
1	Front display overlay	1	PC	Euro ABR97-001441
				UK ABR97-001442
				USA ABR97-001443
2	Weigh pan	1	SST304	ABR97-001444
3	Rubber boss	4	RUBBER Black. Rigidity: 75°	ABR97-001445
4	Rear display overlay	1	PC	Euro ABR97-001446
				UK ABR97-001447
				USA ABR97-001448
5	Tower display upper casing	1	ABS	ABR97-001449
6	Tower display PCB assembly	1		ABR97-001450
7	Tower display front overlay	1	PC	ABR97-001451
				ABR97-001452
				ABR97-001453
8	Tower display bottom casing	1	ABS	ABR97-001454
9	Self-threading screw	10	20Mn	
10	Tower display rear overlay	1	PC	ABR97-001455
11	Tower pole	1	ABS	ABR97-001456
12	Tower pole	1	ABS	ABR97-001457
13	Tower pole bracket	1	ABS	ABR97-001458

Item	Description	Qty.	Material	Part number
14	Tower pole bracket cover	1	SPCC	ABR97-001459
15	Self-threading screw	2	20Mn	
16	Keyboard	1	PC	Euro & UK ABR97-001460
				USA ABR97-001461
17	Upper casing	1	ABS	ABR97-001462
18	Self-threading screw	4	20Mn	
19	Washer	4	EDPM	
20	Front display PCB assembly	1	20 mm LCD	ABR97-001463
21	Ferrite	1		
22	Load cell upper bracket	1	Al	
23	Load cell + brackets	1	Al ZEMIC 6D	ABR97-001464
24	Load cell lower bracket	1	Al	
25	Main PCB Assembly	1		ABR97-001465
26	Level bubble	1	14.7 mm	ABR97-001466
27	Bottom cover	1	ABS	ABR97-001467
28	Calibration PCB Assembly	1		ABR97-001468
29	Foot locknut	4	ABS M8	ABR97-001469
30	Adjustable foot	4	PVC	ABR97-001470
31	Self-threading screw	6	20Mn	
32	Rechargeable battery	1	6V/4A	ABR97-001471
33	Seal cover	2	ABS	ABR97-001472
34	Easily-destroyed label	2		ABR97-001473

Item	Description	Qty.	Material	Part number
35	Sponge-I	1	CR 112 x 70 x 15	
36	Sponge-II	1	CR 79 x 56 x 15	
37	Battery cover	1	ABS	ABR97-001474
38	Self-threading screw	1	20Mn	
39	Intel hexagon screw	4		
40	Washer M6	4	HRC42-50	
41	Washer M6	4	65Mn 200-300HV	
42	Self-threading screw	4	20Mn	
43	Overload stop screw	4	20Mn	
44	Self-threading screw	3	20Mn	
45	Washer M3	3	EDPM	
46	Adaptor jack	1		ABR97-001475
47	Ferrite	1		
48	Power switch	1		ABR97-001477
	PSU	1		UK ABR97-001478
				Euro ABR97-001479
				Euro ABR97-001480
	Front display loom			ABR97-001481

Item	Description	Qty.	Material	Part number
	Rear display looloom - mono			ABR97-001482
	Rear display looloom - tower			ABR97-001483



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